**REPORT – ASSIGNMENT - 4**

The following datasets were considered for this assignment.

alt.atheism

comp\_graphics

rec.autos

sci.crypt

talk.politics.guns

All possible classifiers are computed barring RF and Bagging.

Since memory is insufficient for Bagging and RF, they are commented in the R script.

**RUN - 1**

ENSEMBLE SUMMARY

n-ENSEMBLE COVERAGE n-ENSEMBLE RECALL

n >= 1 1.00 0.92

n >= 2 1.00 0.92

n >= 3 0.97 0.93

n >= 4 0.85 0.97

n >= 5 0.68 0.99

ALGORITHM PERFORMANCE

SVM\_PRECISION SVM\_RECALL SVM\_FSCORE LOGITBOOST\_PRECISION

0.912 0.910 0.908 0.876

LOGITBOOST\_RECALL LOGITBOOST\_FSCORE GLMNET\_PRECISION GLMNET\_RECALL

0.868 0.868 0.892 0.868

GLMNET\_FSCORE TREE\_PRECISION TREE\_RECALL TREE\_FSCORE

0.876 0.844 0.752 0.770

MAXENTROPY\_PRECISION MAXENTROPY\_RECALL MAXENTROPY\_FSCORE

0.928 0.926 0.926

**RUN - 2**

ENSEMBLE SUMMARY

n-ENSEMBLE COVERAGE n-ENSEMBLE RECALL

n >= 1 1.00 0.92

n >= 2 1.00 0.92

n >= 3 0.97 0.93

n >= 4 0.85 0.97

n >= 5 0.68 0.99

ALGORITHM PERFORMANCE

SVM\_PRECISION SVM\_RECALL SVM\_FSCORE LOGITBOOST\_PRECISION

0.914 0.912 0.910 0.876

LOGITBOOST\_RECALL LOGITBOOST\_FSCORE GLMNET\_PRECISION GLMNET\_RECALL

0.868 0.868 0.892 0.868

GLMNET\_FSCORE TREE\_PRECISION TREE\_RECALL TREE\_FSCORE

0.876 0.844 0.752 0.770

MAXENTROPY\_PRECISION MAXENTROPY\_RECALL MAXENTROPY\_FSCORE

0.928 0.926 0.926